
NEEDLE THORACOSTOMY

FIELD ASSESSMENT/TREATMENT INDICATORS

Signs and symptoms of Tension Pneumothorax may include any or all of the following:

- Increasing agitation
- Progressively worsening dyspnea/cyanosis
- Decreased or diminished breath sounds on the affected side
- Hypotension
- Distended neck veins
- Tracheal deviation away from the affected side

PROCEDURE

1. Explain procedure to patient:
 - a. If conscious, place patient in upright position if tolerated
 - b. If patient is unconscious or in axial-spinal immobilization, leave supine
2. Use an approved pre-packaged device. If unable to obtain an approved pre-packaged device:
 - a. For patients > 50kg - select a 14 or 16 gauge 2 to 2 ½ inch needle and cannula
 - b. For patients less than 50kg – select a 18g, 1 to 1 1/4 inch needle and cannula.
3. Prepare area with antiseptic wipes - second intercostal space, midclavicular line.
4. Insert needle perpendicular to the chest wall, at the level of the superior border of the third rib until pleura is penetrated as indicated by one or more of the following:
 - a. A rush of air
 - b. Ability to aspirate free air into the syringe
5. Remove syringe and needle stylet and leave cannula in place. Add flutter valve.
6. Secure needle hub in place with tape or other approved device.
7. Reassess patient lung sounds and respiratory status immediately and every five minutes.
8. Contact Base Hospital.